Inviting and Keeping Women in Engineering

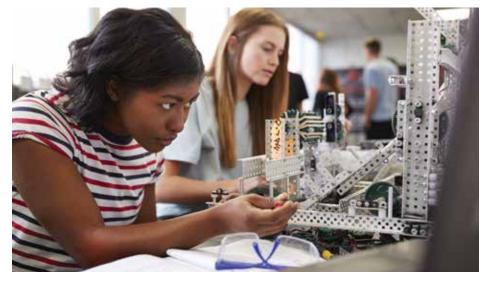
By Jennifer Anderso

here is much talk about how to engage more women to join the engineering field. From elementary schools to universities, career advisors, teachers, and special interest groups are encouraging girls and women to consider and stay in engineering. Why do we want to add more women to the ranks of engineering? Their unique perspective is key to the success of the industry.

While both men and women can learn and apply science the same way, men and women bring different mindsets and aspects to a project team. For the sake of providing your clients with a versatile skillset and wellrounded perspective, it is important to have both men and women as equal contributors to a project team. Despite the best efforts of our educational institutions, the fact is there are still fewer women than men in the engineering fields. So, it is more important than ever to encourage women into engineering positions. Their diverse talents make a difference to the team, department, and firm. Below are some ideas on how to invite more women into the engineering field as well as help keep more women in engineering.

Inviting Women into the **Engineering Profession**

1) Start with girls. Early introduction of girls to engineering is the best way to get them to realize that they can have a career in engineering. Many women are not exposed to engineering career options until they are in high school and are, therefore, at a disadvantage to their male counterparts. For many girls, much of the information they receive early on is about traditionally female-focused careers, e.g., nursing and teaching. Studies show that girls also feel less confident around math. Ganley and Lubienski's article on gender differences in math, published in Teaching Children Mathematics (https://bit.ly/39Qo1RY), highlights that girls are performing the same as boys on math tests. Still, the girls have a hard time relating to careers associated with strong math and science knowledge. So, if you have a young girl in your life, talk to her about engineering and engage her with age-appropriate activities to show her that she can do science, math, and technology-related activities.



2) Continue the conversation with girls. Encouraging adolescents and teens to stay interested in engineering requires more than one conversation. This concept needs to be understood and endorsed by teachers, school advisors, family members, adult friends of parents, community groups, and more. Again, keep engaging the girls in your life. Be that uncle who gives her presents that are engineering related. Take her to meet your friends at work and show her what an engineer does. Many girls see other women doing jobs that are not engineering related, so it is harder for them to relate.

Keeping Women in Engineering

- 1) Be real about mothers' needs. Women need time off for maternity leave (ideally, the dad's need time off for paternity leave too) because it leads to healthier babies, less post-partum issues, and more satisfied women in the workplace. Regardless of the family dynamic, often one parent will stay home to help raise children through their pre-school years. During that time, some women feel like they are losing ground with their careers because they choose to spend time with their littles. If you are in management, seek ways to keep those SAHM (stay at home moms) engaged with your firm by having real conversations before going on maternity leave.
- 2) Support programs. Whether starting an initiative at your local schools or supporting

another existing program, look for ways for your firm to support programs that aim to attract women (and marginalized groups) into engineering. You can support with monetary donations, employee volunteering, by encouraging adjunct teaching, or use of your facilities for learning and ongoing education.

In both inviting and keeping women in engineering, current female and male engineers have a responsibility to continue to speak up and share ideas with their managers, their alma-maters, their current firm, and with professional organizations, all of whom are seeking more diversity in engineering roles. Make it a priority to communicate and help to bring about the necessary changes for firms to be profitable and provide excellent workplaces for everyone.

In the end, workplaces will continue to change and evolve. Look at how your firm is engaging with the community at large because even though you cannot hire that 7-year-old girl today, you can in about 15 years. If you are an individual contributor, a manager, or the owner of a firm, seek opportunities to invite and keep more women in engineering. The profession, your firm, your clients, and the community need the effort and will benefit from it.



Born into a family of engineers but focusing on the people side of engineering, Jen Anderson has over 21 years of helping leaders build stronger careers for themselves and their teams. (www.CareerCoachJen.com)